Hot spring temperatures more likely in North China

5 November 2015 - New research has found human influence on the climate has led to an 11 fold increase in the likelihood of extremely hot spring mean temperatures in northern China

The joint research, carried out by the Met Office Hadley Centre and Chinese Meteorological Administration , found that what would have been roughly a once-in-43-year spring for northern China in a world without manmade greenhouse gas emissions has become roughly a once-in-4-year event.

Spring 2014 was the third warmest in northern China since the late 1950s. Drought and hot winds had serious impacts on agriculture and on human health.

Studies like this one provide decision makers with guidance as to the potential urgency and scale of measures needed to help sectors adapt to the impacts of a changing climate.

This research is the first to be published by the Climate Science for Service Partnership China (CSSP China), which is funded through the UK-China Research and Innovation Partnership fund (the Newton Fund in China).

Professor Stephen Belcher, Director of the Met Office Hadley Centre, who oversees CSSP China in the UK, said: "This is one of our most important partnerships, not only will it develop cutting edge climate science, but it will use its expertise to help develop climate services that support climate-resilient growth and development."

Doctor Lianchun Song, the first author of the paper, who is Director of the National Climate Centre of China Meteorological Administration, said: "This is important joint research between China and UK. The findings may have significant implications for the public and for policy development that relates to climate change adaptation and mitigation."

In East Asia, rapid economic development and a growing population mean the impact of extreme weather events might be particularly severe. The growth of cities (urbanisation) has played a small but identifiable role in the warming over the northern China region since the 1960s. China is particularly at risk of extreme weather such as heavy rainfall, flooding, tropical cyclones, extreme heat and drought.

CSSP China aims to harness shared Chinese and UK expertise and capability, and lay the groundwork for future work together that will provide the information and support needed to help China and the UK to mitigate and adapt to the impacts of climate change.

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